



Modeling & Simulation

Standards:

Should You Care?

COL Jerry Glasow, USA
Director, Defense Modeling and Simulation
Office
[**jerry.glasow@dmso.mil**](mailto:jerry.glasow@dmso.mil)
703-998-0660



What is Modeling & Simulation?

**Represent
the Real World:**

- Environments
- People
- Equipment
- Activities
- Processes



Why Modeling and Simulation?

- **M&S is a key enabler of Transformation**
 - (DoD Transformation Planning Guidance)
- **Too Dangerous...Model it. Simulate it.**
- **Too Expensive...Model it. Simulate it.**
- **Don't Understand it...Model it. Simulate it.**
- **Ubiquitous...**
 - Analysis (Programming Resources, Planning Ops)
 - Acquisition (Systems Engineering, Alternatives)
 - Test & Evaluation (Large Scale Joint Environments)
 - Training & Education (Simulators to Campaigns)



Why should you care?

In a word: **COMPLEXITY**

Increased warfare and system complexity demands more practice, prototypes, and experimentation—which budgets may not support

Complexity of operations and systems

Limited Resources

M&S can bridge the gap by:

- Supporting **concept** development
- Developing **doctrine**
- Exploring new **organizational** efficiencies

DOTMLPF areas

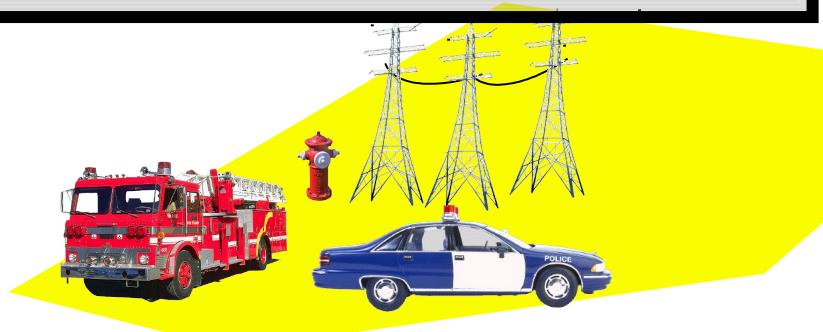


M&S Standards Strategy: An Analogy to City Planning



Common Technical Framework

- High Level Architecture
- SEDRIS Environment Standards
- Data Standards



Common Services

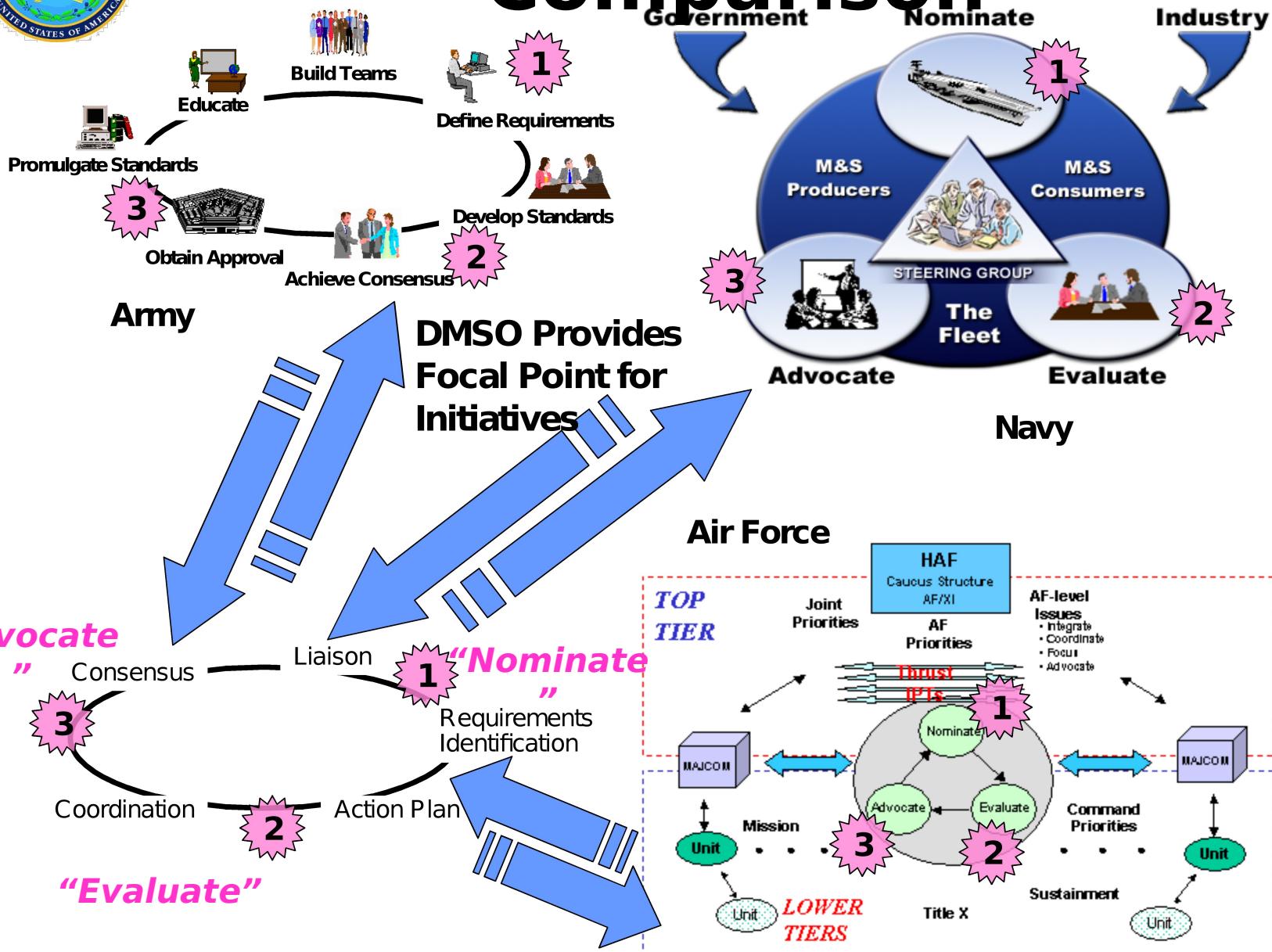
- Environmental databases
- Communication networks
- VV&A policy and procedure
- Help Desks and Education
- Resource repositories
- Supporting software/tools

Payoffs: Interoperability and Re-use

Capability and Cost-Effectiveness



Standards Process Comparison





Standards for M&S

➤ M&S Specific

- Simulation Interoperability
- Simulation Interfaces
- Environment Representation
- Verification, Validation & Accreditation

➤ Community-wide Interest

- C2 Interoperability
- Data Management/Standards
- Metadata
- Communications Protocols
- Web Services